

Application No.: 10/823,482  
Amendment dated: May 9, 2005  
Reply to Office Action of February 23, 2005  
Attorney Docket No.: 2802-159-036

This listing of the claims will replace all prior versions, and listings, of claims in the patent application.

**Listing of Claims:**

Please Cancel Claims 1-3

1       4. (Original) A permanently attached hose coupling, for a pressurized conduit end,  
2 having a generally tubular nipple and a generally cylindrical shell permanently attached  
3 to said nipple and generally surrounding said conduit end, said nipple having a  
4 longitudinal axis, a first end, a second end, a plurality of circumferential grooves located  
5 between said first and said second ends, a bore extending from said first end to said  
6 second end, and an insert portion adjacent said plurality of grooves inserted into said  
7 conduit end;

8                   wherein said grooves are dimensioned for affixedly receiving at least one  
9 of an inside surface, an end surface and an outside surface of said generally cylindrical  
10 shell; and

11                  said grooves comprising:

12                  a first groove with a generally flat base portion parallel with said  
13 longitudinal axis, a first substantially vertically oriented side wall, and a second  
14 substantially vertically oriented side wall having a maximum radial extent less than said  
15 first side wall; a second groove adjacent said first groove, with a generally flat base  
16 portion parallel with said longitudinal axis having a diameter less than said first groove  
17 base portion, a first substantially vertically oriented side wall having a maximum radial  
18 extent similar to said first groove second side wall, and a second substantially vertically  
19 oriented side wall having a maximum radial extent less than said second groove first side  
20 wall; and

21                  a third groove adjacent said second groove, with a generally flat base  
22 portion parallel with said longitudinal axis having a diameter less than said second  
23 groove base portion, a first substantially vertically oriented side wall having a maximum

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24 radial extent similar to said second groove second side wall and a second substantially  
25 vertically oriented side wall having a maximum radial extent greater than said third  
26 groove first side wall.

1 5. (Original) The hose coupling as in claim 4 wherein said first groove second side  
2 wall and said second groove second side wall have a contoured top portion.

1 6. (Original) The hose coupling as in claim 4 wherein said first groove second side  
2 wall and said second groove second side wall have an angled top portion.

1 7. (Original) The hose coupling as in claim 4 wherein said insert portion has a  
2 plurality of spaced, circumferentially extending, frusto-conically shaped protrusions on  
3 the outer surface thereof.

1 8. (Original) The hose coupling as in claim 7 wherein one of said plurality of  
2 spaced protrusions is positioned approximately equidistant between said third groove and  
3 said second end and has a maximum radial extent greater than that of each of the others  
4 of said plurality of protrusions.

1 9. (Original) The hose coupling as in claim 4 wherein said generally flat base  
2 portion of each of said plurality of circumferential grooves has a series of surface  
3 disruptions along its circumference.

1 10. (Original) The hose coupling as in claim 4 wherein the outer surface of said third  
2 groove second substantially vertically oriented side wall has threads for attachment with  
3 said generally cylindrical shell.

1 11. (Original) A permanently attached hose coupling, for a pressurized conduit end,  
2 having a generally tubular nipple and a generally cylindrical shell permanently attached

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3 to said nipple and generally surrounding said conduit end, said nipple having a  
4 longitudinal axis, a first end, a second end, a plurality of circumferential grooves located  
5 between said first and said second ends, a bore extending from said first end to said  
6 second end, and an insert portion adjacent said plurality of grooves inserted into said  
7 conduit end;

8 wherein said grooves are dimensioned for affixedly receiving at least one  
9 of an inside surface, an end surface and an outside surface of said generally cylindrical  
10 shell; and

11 said grooves comprising:

12 a first groove with a generally flat base portion parallel with said longitudinal axis, a first  
13 substantially vertically oriented side wall, and a second substantially vertically oriented  
14 side wall having a maximum radial extent less than said first side wall; and

15 second groove adjacent said first groove, with a generally flat base  
16 portion parallel with said longitudinal axis having a diameter less than said first groove  
17 base portion, a first substantially vertically oriented side wall having a maximum radial  
18 extent similar to said first groove second side wall, and a second substantially vertically  
19 oriented side wall having a maximum radial extent greater than said second groove first  
20 side wall.

1 12. (Original) The hose coupling as in claim 11 wherein said insert portion has a  
2 plurality of spaced, circumferentially extending, frusto-conically shaped protrusions on  
3 the outer surface thereof.

1 13. (Original) The hose coupling as in claim 12 wherein one of said plurality of  
2 spaced protrusions is positioned approximately equidistant between said second groove  
3 and said second end and has a maximum radial extent greater than that of each of the  
4 others of said plurality of protrusions.

1 14. (Original) The hose coupling as in claim 11 wherein said generally cylindrical

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2 shell has a first end with an inwardly directed portion having an annular surface in an  
3 abutting relationship with one of said plurality of circumferential grooves for said  
4 permanent attachment.

1 15. (Original) The hose coupling as in claim 14 wherein said inwardly directed  
2 portion is located at the longitudinal inner end of said generally cylindrical shell.

1 16. (Original) The hose coupling as in claim 14 wherein said inwardly directed  
2 portion is located on the inside surface of said generally cylindrical shell.

1 17. (Original) The hose coupling as in claim 11 wherein said generally cylindrical  
2 shell has a first end and a second end, said first end having a turned-in portion generally  
3 directed towards said second end.

1 18. (Original) The hose coupling as in claim 17 wherein the outer surface of said  
2 turned-in portion is in affixed abutment with said second groove first side wall.

1 19. (Original) The hose coupling as in claim 11 wherein the inside surface of said  
2 generally cylindrical shell affixedly abuts said first and said second side walls of said  
3 second groove.

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1 27. (Original) A generally tubular nipple having a longitudinal axis, a first end, a  
2 second end, an outer surface with a plurality of circumferential grooves, located between  
3 said first and said second ends, for affixedly receiving a generally cylindrical shell, and a  
4 bore extending from said first end to said second end;

5 wherein said plurality of circumferential grooves are dimensioned for  
6 affixedly receiving at least one of an inside surface, an end surface and an outside surface

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7 of said generally cylindrical shell; and

8                 said plurality of grooves comprising:

9                         a first groove with a generally flat base portion parallel with said  
10 longitudinal axis, a first generally vertically oriented side wall, and a second generally  
11 vertically oriented side wall having a maximum radial extent less than said first side wall;

12                         a second groove adjacent said first groove, with a generally flat base  
13 portion parallel with said longitudinal axis having a diameter less than said first groove  
14 base portion, a first generally vertically oriented side wall having a maximum radial  
15 extent substantially equal to said first groove second side wall, and a second generally  
16 vertically oriented side wall having a maximum radial extent less than said second groove  
17 first side wall; and

18                         a third groove adjacent said second groove, with a generally flat base  
19 portion parallel with said longitudinal axis having a diameter less than said second  
20 groove base portion, a first generally vertically oriented side wall having a maximum  
21 radial extent substantially equal to said second groove second side wall and a second  
22 generally vertically oriented side wall having a maximum radial extent greater than said  
23 third groove first side wall.

1         28. (Original) The generally tubular nipple as in claim 27 further including an insert  
2 portion located between said third groove and said second end and has a plurality of  
3 spaced, circumferentially extending, frusto-conically shaped protrusions on the outer  
4 surface thereof.

1         29. (Original) The generally tubular nipple as in claim 27 wherein one of said  
2 plurality of spaced protrusions is positioned approximately equidistant between said third  
3 groove and said second end and has a maximum radial extent greater than that of each of  
4 the others of said plurality of protrusions.

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1       30. (Original) The generally tubular nipple as in claim 27 wherein said generally flat  
2       base portion of each of said plurality of circumferential grooves has a series of surface  
3       disruptions along its circumference.

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1       31. (Original) The generally tubular nipple as in claim 27 wherein the outer surface  
2       of said third groove second substantially vertically oriented side wall has threads for  
3       attachment with said generally cylindrical shell.

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1       32. (Original) A generally tubular nipple having a longitudinal axis, a first end, a  
2       second end, an outer surface with at least two circumferential grooves located between  
3       said first and said second ends for affixedly receiving a generally cylindrical shell, and a  
4       bore extending from said first end to said second end;

5 wherein said at least two circumferential grooves are dimensioned for  
6 affixedly receiving at least one of an inside surface, an end surface and an outside surface  
7 of said generally cylindrical shell; and

8

said at least two circumferential grooves comprising:

9                   a first groove with a generally flat base portion parallel with said  
10          longitudinal axis, a first generally vertically oriented side wall, and a second generally  
11          vertically oriented side wall having a maximum radial extent less than said first side wall;  
12          and

13 second groove adjacent said first groove, with a generally flat base  
14 portion parallel with said longitudinal axis having a diameter less than said first groove  
15 base portion, a first generally oriented side wall having a maximum radial extent  
16 generally equal to said first groove second side wall, and a second generally vertically  
17 oriented side wall having a maximum radial extent greater than said second groove first  
18 side wall.

1       33. (Original) The generally tubular nipple as in claim 32 further including an insert  
2 portion located between said second groove and said second end and has a plurality of

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3 spaced, circumferentially extending, frusto-conically shaped protrusions on the outer  
4 surface thereof.

1 34. (Original) The generally tubular nipple as in claim 33 wherein one of said  
2 plurality of spaced protrusions is positioned approximately equidistant between said  
3 second groove and said second end and has a maximum radial extent greater than that of  
4 each of the others of said plurality of protrusions.

1 35. (Original) The generally tubular nipple as in claim 32 wherein said generally flat  
2 base portion of each of said at least two circumferential grooves has a series of surface  
3 disruptions along its circumference.

1 36. (Original) The generally tubular nipple as in claim 32 wherein the outer surface  
2 of said second groove second substantially vertically oriented side wall has threads for  
3 attachment with said generally cylindrical shell.

1 37. (Original) A generally tubular nipple having a longitudinal axis, a first end, a  
2 second end, an outer surface with a series of circumferential grooves located between  
3 said first and said second ends for affixedly receiving a generally cylindrical shell, and a  
4 bore extending from said first end to said second end;

5 wherein said series of circumferential grooves are dimensioned for  
6 affixedly receiving at least one of an inside surface, an end surface and an outside surface  
7 of said generally cylindrical shell; and

8 said series of grooves comprising:

9 a first groove with a generally flat base portion parallel with said  
10 longitudinal axis, a first substantially radially directed side wall, and a second  
11 substantially radially directed side wall;

12 a second groove adjacent said first groove, with a generally flat base  
13 portion parallel with said longitudinal axis having a diameter less than said first groove

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14 base portion, a first substantially radially directed side wall, having a maximum radial  
15 extent generally equal to said first groove second side wall, and a second substantially  
16 radially directed side all; and

17                   a third groove adjacent said second groove, with a generally flat base  
18 portion parallel with said longitudinal axis having a diameter less than said second  
19 groove base portion, a first substantially radially directed side wall, having a maximum  
20 radial extent generally equal to said second groove second side wall, and a second  
21 substantially radially directed side wall.

1                 38. (Original) The generally tubular nipple as in claim 37 wherein said first  
2 groove second side wall and said second groove second side wall have a contoured top  
3 portion.

1                 39. (Original) The generally tubular nipple as in claim 37 wherein said first groove  
2 second side wall and said second groove second side wall have an angled top portion.

1                 40. (Original) The generally tubular nipple as in claim 37 further including an insert  
2 portion located between said third groove and said second end and has a plurality of  
3 spaced, circumferentially extending, frusto-conically shaped protrusions on the outer  
4 surface thereof.

1                 41. (Original) The generally tubular nipple as in claim 40 wherein one of said  
2 plurality of spaced protrusions is positioned approximately equidistant between said third  
3 groove and said second end and has a maximum radial extent greater than that of each of  
4 the others of said plurality of protrusions.

1                 42. (Original) The generally tubular nipple as in claim 37 wherein said generally flat  
2 base portion of each of said series of circumferential grooves has a series of surface  
3 disruptions along its circumference.

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1       43. (Currently Amended) [[The]] A generally tubular nipple as in claim 37 wherein  
2       the outer surface of said third groove second substantially vertically oriented side wall  
3       has a series of threads for attachment with said generally cylindrical shell having a  
4       longitudinal axis, a first end, a second end, an outer surface with a series of  
5       circumferential grooves located between said first and second ends for affixedly  
6       receiving a generally cylindrical shell, and a bore extending from said first end to said  
7       second end;

8                         wherein said series of circumferential grooves are dimensioned for  
9       affixedly receiving at least one of an inside surface, an end surface and an outside surface  
10      of said generally cylindrical shell; and

11                         said series of grooves comprising:

12                         a first groove with a generally flat base portion parallel with said  
13       longitudinal axis, a first substantially radially directed sidewall, and a second  
14       substantially radially directed sidewall;

15                         a second groove adjacent said first groove, with a generally flat base  
16       portion parallel with said longitudinal axis having a diameter less than said first groove  
17       base portion, a first substantially radially directed sidewall, having a maximum radial  
18       extent generally equal to said first groove second sidewall, and a second substantially  
19       radially directed sidewall; and

20                         a third groove adjacent said second groove, with a generally flat base  
21       portion parallel with said longitudinal axis having a diameter less than said second  
22       groove base portion, a first substantially radially directed sidewall, having a maximum  
23       radial extent generally equal to said second groove second sidewall, and a second  
24       substantially radially directed sidewall having an outer surface with a series of threads for  
25       attachment with said generally cylindrical shell.

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